REMARKS

The specification and title have been amended to make editorial changes therein, bearing in mind the criticisms in the Official Action, to place the application in condition for allowance at the time of the next Official Action.

The indication that claims 3 and 6-9 include patentable subject matter is acknowledged with thanks. In reliance thereon, claims 3 and 6 have been placed in independent form by adding the subject matter of claims 1 and 2 to claim 3 and the subject matter of claim 1 to claim 6. Accordingly, consideration and allowance of claims 3 and 6-9 are respectfully requested.

The Official Action objects to the form of claim 1 and rejects claims 5 and 9 under §112, second paragraph. These claims have been amended solely as to form and reconsideration and withdrawal of the objection and rejection are respectfully requested.

Claims 1-2, 4 and 10 were rejected as unpatentable over UTAGAWA 6,563,538 in view of MIYAKE 5,917,963; and claim 5 was rejected further in view of WALLIS et al. ("An Optimal Rotator for Iterative Reconstruction," IEEE Transactions on Medical Imaging, Vol. 16, No. 1, February 1997.) Reconsideration and withdrawal of the rejection are respectfully requested.

Claim 1 defines a method for processing data in the form of a grid of discrete source values in which at least one target value (P_t) for a target point (T) within a region (A) of

the source values is determined by weighted interpolation of the source values in said region (A), a minimum value (I_{min}) and a maximum value (I_{max}) within a local region (B) of the source values around the target point (T) are determined, a measure of the dynamics within the local region (B) is determined, and the target value (P_t) is adjusted in the direction of one of the minimum and maximum values on the basis of the determined measure of the dynamics. Implementation of the method and the corresponding formulae are given on pages 7-8 of the application.

The Official Action acknowledges that UTAGAWA does not disclose a method in which a minimum value (I_{min}) and a maximum value (I_{max}) within a local region (B) of the source values around the target point (T) are determined, and in which the target value (P_t) is adjusted in the direction of one of the minimum and maximum values on the basis of the determined measure of the dynamics. The Official Action relies on MIYAKE for the suggestion to modify UTAGAWA to include these features.

While MIYAKE discloses that minimum and maximum values within a region of the source values around the target point are determined, there is no suggestion in this reference to adjust the target value in the direction of one of the minimum and maximum values on the basis of the determined measure of the dynamics. At columns 5-6, MIYAKE averages the maximum and minimum values and uses the average to determine a difference value "b" and also uses the maximum and minimum values to find a

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contrast value "c." See also Figure 1 in which the detected maximum and minimum are provided to median value calculation portion 104 and contrast calculation portion 106. There is no suggestion here to adjust the target value in the direction of one of the minimum and maximum values on the basis of the determined measure of the dynamics. Indeed, the average and difference replace the maximum and minimum values so that it would not be possible to determine which direction to make an adjustment, if one were being made on the basis of the determined measure of the dynamics.

By way of further explanation and referring to equation 6 in column 12 of MIYAKE, it is clear that the minimum and maximum values are added to the interpolated value $P(i,j)$ using coefficients a, b and c; but there is no disclosure of how these coefficients are obtained and no disclosure of calculating these coefficients depending on the local dynamics in the region of interest. On the contrary, please note that MIYAKE uses a "smoothing process 1103" (column 12, line 18), and hence explicitly destroys correlation information in the target region. Accordingly, it would not be obvious to combine UTAGAWA with MIYAKE in order to put more emphasis on dynamics in the target region, as according to the latter this information should be ignored because it would otherwise adversely affect the computation result of the target value.
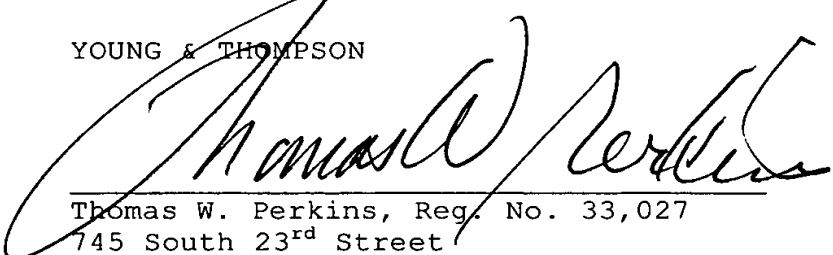
Even if the references were combined, UTAGAWA would not teach to calculate the coefficients a, b and c taught by MIYAKE in relation to the dynamics within the region of interest. To be more precise, UTAGAWA does not teach anything with respect to the dynamics determined in the target region apart from discarding values in a direction with low correlation during the interpolation process.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

Thomas W. Perkins, Reg. No. 33,027
745 South 23rd Street
Arlington, VA 22202
Telephone (703) 521-2297
Telefax (703) 685-0573
         (703) 979-4709

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